Amendment to the claims:

The following listing of claims will replace all prior versions and listings, of claims in this application.

Listing of claims:

1. (Previously Presented) An isolated adult multipotent human stem cell comprising:

   i) an endogenous telomerase activity of at least 20% to 50% of the telomerase activity of the HEK293T transformed cell line,

   ii) an HLA Class I negative phenotype,

   iii) a normal karyotype,

   iv) a capacity to become quiescent after 50 to 80 population doublings, and

   v) a capacity for self-renewal preserved for at least 130 population doublings, and

   vi) a degree of senescence of less than 0.05% at 60 population doublings.

2. (Previously Presented) The stem cell according to claim 1, wherein the stem cell has a self-renewal capacity preserved for at least 200 population doublings.

3. (Previously Presented) The stem cell according to claim 1 or claim 2, wherein the stem cell can be isolated from human adipose tissue.

4. (Previously Presented) The stem cell of claim 3, wherein the stem

cell can differentiate into a cell of endodermal, ectodermal or mesodermal origin.

5. (Previously Presented) The stem cell of claim 4, wherein the stem cell is capable of differentiating into an adipocyte, osteoblast, myocyte, chondrocyte or endothelial cell.

6. (Cancelled)

7. (Previously Presented) The stem cell of claim 6 wherein the stem cell expresses the transcription factor Oct-4 and/or Rex-1.

8. (Cancelled)

9. (Previously Presented) A cell population consisting essentially of cells according to any one of claims 1, 51 or 53.

10. (Previously Presented) The cell population of claim 9, wherein the cell population is clonal.

11. (Previously Presented) The cell population according to claim 9 wherein the cell population becomes quiescent after about 60 population doublings.

12. (Previously Presented) The cell population of claim 11, wherein the cell population is capable of proliferating in the presence of basic fibroblast growth factor (bFGF).

13.- 24. (Cancelled)

25. (Currently Amended) Stem cells obtainable by carrying out the method comprising the following steps:

a) enzymatically digesting~~on of~~ a sample of human adipose tissue obtained from a newborn to 8 year old child ~~under 10 years of age~~ ;

b) recovering from the digested sampled obtained in step a) a cell fraction that is free of adipocytes, said cell fraction containing all of the cell types present in said sample ~~the preparation obtained in (a)~~ with the exception of adipocytes;

c) carrying out in vitro culture of the cell fraction obtained in step (b) for ~~at least~~ 12 hours;

d) selecting from the *in* vitro culture of step c) ~~separating~~ the cells which have adhered 12 hours after starting the culture, to obtain a ~~two~~ cell sub-population[[s,]] termed "CA"; ~~and "CS" populations, the "CA" population having an adhesion rate of less than 12 hours, and the "CS" population having an adhesion rate of more than 12 hours,~~

e) culturing ~~enriching~~ the "CA" sub population of cells ~~"CA"~~ *in* vitro for 50 to 80 population doublings and diluting the cells a maximum of two or three fold at each transfer until a quiescent population of cells is obtained ~~that is capable of entering a quiescent state~~,

f) optionally, inducing proliferation of the ~~stem cells of~~ quiescent population of cells obtained in step e), and ~~"CA".~~

g) recovering the cells obtained in step e) or f), so as to thus recover stem cells.

26. (Previously Presented) Stem cells according to claim 1 or 25, for use in therapy.

27. (Previously Presented) Stem cells of 26, wherein the therapy comprises transplantation of cells into an individual followed by cell differentiation and tissue regeneration in vivo.

28. (Previously Presented) Stem cells of claim 26, wherein the transplantation is allogenic.

29. - 47. (Cancelled)

48. (Previously Presented) A pharmaceutical composition comprising a plurality of cells according to claim 1 or 25, and a physiologically acceptable excipient.

49.-50. (Cancelled)

51. (Previously Presented) The stem cell of claim 1, wherein the cell has the following phenotype:

HLA class I negative;

HLA class II negative;

CD3 negative;

CD13 positive;

52. (Previously presented) The stem cell according to claim 1 or 51,

wherein the cell has a CD13 positive phenotype in the presence of 10% foetal calf serum.

53. (Previously Presented) An isolated adult multipotent human stem cell, characterized in that after reaching quiescence, it stably exhibits the following phenotype in vitro:

HLA class I negative,

HLA class II negative,

CD3 negative,

CD13 positive,

LIF-R negative,

Oct-4 positive,

Rex-1 positive,

ABCG2 positive,

and in that it has a normal karyotype and significant telomerase activity of at least 20% to 50% of the telomerase activity of the HEK293T transformed cell line, and a degree of senescence of less than 0.05% at 60 population doublings.

54. (Previously Presented) The cell of claim 53, wherein the cell has immunoprivileged behavior in vivo and a capacity to migrate in the undifferentiated state.